Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Draft

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**East KY Power Cooperative, Inc.**
Mailing Address:	**P. O. Box 707, Winchester, Kentucky 40392-0707**
Source Name:	**Hugh L. Spurlock Generating Station**
Mailing Address:	**P. O. Box 707, Winchester, Kentucky 40392-0707**
Source Location:	**1301 West 2nd Street, Maysville, KY 41056**
Permit Number:	**V-06-007**
Source A. I. #:	**3004**
Activity #:	**APE20040001**
Review Type:	**TitleV/PSD/Acid Rain/NOx Budget, Const./Oper**
Source ID #:	**21-161-00009**
Regional Office:	**Ashland** **1550 Wolohan Drive, Suite 1** **Ashland 41102-8942** **606-929-5285**
County:	**Mason**
Application Complete Date:	**January 20, 2006**
Issuance Date:	
Revision Date:	
Expiration Date:	

John S. Lyons, Director
Division for Air Quality

Revised 12/09/02

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Rev. #	**Permit type**	**Log #**	**Complete Date**	**Issuance Date**	**Summary of Action**
Initial Issuance	V-97-050	50089	2/11/97	12/10/99	Title V/PSD Units 01 & 02
V-97-050 RI	Significant Revision	53775	2/08/02	8/04/02	Additional CFB Unit 03
V-97-050 RII	Adminis-trative	50089, 53775		10-15-04	Deletion of material errors
Renewal & Significant Revision V-06-007	NSR/PSD	Activity# APE20040001			Title V permit renewal and significant revision for construction of Unit#4 boiler-turbine-generator

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation and construction of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 - Indirect Heat Exchanger (Unit 1)

Description:

Pulverized coal,dry-bottom, wall-fired boiler, rated 3500 mmBtu/hr with low NOx burners
Number two fuel oil used for startup and stabilization
Control equipment: Electrostatic precipitator; Selective Catalytic reduction
Construction commenced before: 1971

Applicable Regulations:

401 KAR 61:015, Existing indirect heat exchangers with a capacity more than 250 mmBtu per hour and commenced before August 17, 1971.
401 KAR 51:160, NO_x requirements for large utility and industrial boilers, incorporating by reference 40 CFR 96.
401 KAR 52:060, Acid rain permits, incorporating by reference the Federal Acid Rain provisions 40 CFR Parts 72 to 78.
40 CFR Part 64, Compliance Assurance Monitoring

1. Operating Limitations: None

2. Emission Limitations:

a) Pursuant to 401 KAR 61:015, Section 4 (1), particulate emissions shall not exceed 0.14 lb/mmBtu based on a three-hour average.

b) Pursuant to 401 KAR 61:015, Section 4 (2), emissions shall not exceed 20 percent opacity based on a six-minute average except that a maximum of 40 percent opacity is allowed for a period or aggregate of periods not more than six minutes in any 60 minutes during building a new fire, cleaning the firebox, or blowing soot.

c) Pursuant to 401 KAR 61:015, Section 1 (3)(e), sulfur dioxide emission shall not exceed 3.0 lb/mmBtu based on a twenty-four-hour average.

3. Testing Requirements:

a) In accordance with subsection 4(b), the permittee shall submit a schedule within six months from the date of issuance of this permit to conduct testing within one year following the issuance of this permit to establish the correlation between opacity and particulate emissions. This testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

b) If no additional stack tests are performed pursuant to subsection 4(b), the permittee shall conduct one performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the allowable standard.

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4. Specific Monitoring Requirements:

a) Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 10, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate:

1) Accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs or;

2) Determine opacity using reference Method 9 if emissions are visible, inspect the COM and/or the control equipment, and make any necessary repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

b) Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for particulate matter, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1) and the CAM plan filed on October 27, 2005, opacity shall be used as an indicator of particulate matter emissions in conjunction with monitoring of the electrostatic precipitator's transformer/rectifier voltage and current levels. Pursuant to 40 CFR Part 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.

1) If any six-minute average opacity (averaged over a period of three hours) value exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs.

2) If five (5) percent or greater of COM data (data averaged over six-minute periods) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate matter standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G(a)(17) of the permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

3) If primary or secondary voltage or current levels of the transformer/rectifier sets are found to be outside normal ranges, corrective action shall be initiated.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

c)Pursuant to 401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A, and 401 KAR 52:020, Section 10, continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide, nitrogen oxides, and either oxygen or carbon dioxide emissions. If any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEMS and make any necessary repairs or take corrective actions as soon as practicable.

d) Pursuant to 401 KAR 61:015, Section 6(1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division.

e) Pursuant to 401 KAR 61:015, Section 6(3), the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

f) Pursuant to 401 KAR 61:005, section 3(5), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

5. Specific Record Keeping Requirements:

a) Records shall be kept in accordance with 401 KAR 61:005, Section 3(16)(f) and 61:015, Section 6, with the exception that the records shall be maintained for a period of five years.

b) The permittee shall maintain the records of the following:

1) data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;
2) the results of all compliance tests;
3) percentage of the COM data (excluding startup, shutdown, and malfunction data) showing excursions above the opacity standard and the opacity indicator level;
4) transformer/rectifier primary and secondary voltage and current levels at least once per shift;
5) the records of the fuel analysis;
6) the rate of fuel burned on a daily basis;
7) the heating value and ash content on a weekly basis; and
8) the average electrical output and the minimum and maximum hourly generation rates on a daily basis.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 61:005, Section 3 (16), minimum data requirements, which follow, shall be maintained and furnished in the format specified by the Division.. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

i) Owners or operators of facilities required to install continuous monitoring systems, or those utilizing fuel sampling and analysis for sulfur dioxide emissions, shall submit for every calendar quarter, a written report of excess emissions, the nature, and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emission standard averaging period

ii) For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the applicable opacity standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity. Opacity data shall be reported in electronic files only.

iii) a report of the number of excursions (excluding any exempted time periods) above the opacity indicator level, date and time of the excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity indicator level.

iv) For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.. The hourly averages shall not appear in the written summary, but shall be provided in electronic files only.

v) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

vi) When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

7. <u>Specific Control Equipment Operating Conditions:</u>

a) The electrostatic precipitator and selective catalytic reduction system shall be operated in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

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Emissions Unit 02 - Indirect Heat Exchanger (Unit 2)

Description:

Pulverized coal-fired boiler,dry bottom, tangentially-fired rated 4850 mmBtu/hr equipped with low NOx burners
Number two fuel oil used for startup and stabilization
Control equipment: Electrostatic precipitator, Selective catalytic reduction and flue gas desulfurization (FGD) system
Construction commenced: 1981

Applicable Regulations:

401 KAR 51:160, NOx requirements for large utility and industrial boilers; incorporating by reference 40 CFR 96
401 KAR 52:060, Acid rain permits, incorporating by reference the Federal Acid Rain provisions in 40 CFR Parts 72 to 78
401 KAR 59:015, New Indirect Heat exchangers with more than 250 mmBtu per hour capacity and commenced on or after August 17, 1971;
40 CFR 60 Subpart D, Standards of Performance for fossil-fuel-fired steam generators, for an emissions unit greater than 250 mmBtu/hr and commenced after August 17, 1971.
40 CFR Part 64, Compliance Assurance Monitoring
40 CFR 52.21, Prevention of significant deterioration of air quality

1. **Operating Limitations**: None

2. **Emission Limitations:**

a) Pursuant to 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/mmBtu based on a three-hour average.

b) Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.

c) Pursuant to 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 1.2 lb/mmBtu based on a three-hour average.

d) Pursuant to 401 KAR 59:015, Section 6(1)(c), nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/mmBtu based on a three-hour average.

3. **Testing Requirements:**

a) In accordance with subsection 4(b), the permittee shall submit a schedule within six months from the date of issuance of this permit to conduct testing within one year following the issuance of this permit to establish the correlation between opacity and particulate emissions. This testing shall be conducted in accordance with 401 KAR

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50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

b) If no additional stack tests are performed pursuant to subsection 4(b), the permittee shall conduct one performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the allowable standard.

4. Specific Monitoring Requirements:

a) Pursuant to 401 KAR 59:015, Section 7, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 10, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate:

i) Accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs or;

ii) Determine opacity using reference Method 9 if emissions are visible, inspect the COM and/or the control equipment, and make any necessary repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

b) Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for particulate matter, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1) and the CAM plan filed on October 27, 2005, opacity shall be used as an indicator of particulate matter emissions in conjunction with monitoring of the electrostatic precipitator's transformer/rectifier voltage and current levels. Pursuant to 40 CFR Part 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.

i) If any six-minute average opacity (averaged over a period of three hours) value exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs.

ii) If five (5) percent or greater of COM data (data averaged over six-minute periods) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate matter standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G(a)(17) of the permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have

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been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

iii) If primary or secondary voltage or current levels of the transformer/rectifier sets are found to be outside normal ranges, corrective action shall be initiated.

c) Pursuant to 401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A, and 401 KAR 52:020, Section 10, continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide, nitrogen oxides, and either oxygen or carbon dioxide emissions. Pursuant to 40 CFR 64.3(d), the nitrogen oxides CEMS shall be used to satisfy CAM requirements. Pursuant to 40 CFR 64.3(d), the sulfur dioxide CEMS shall be used to satisfy CAM requirements when the flue gas desulfurization system is in use.

i) If any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEMS and make any necessary repairs or take corrective actions as soon as practicable.

ii) If any three-hour average nitrogen oxide value exceeds the standard, the permittee shall as appropriate, initiate an investigation of the cause of the exceedance and/or the CEMS and make any necessary repairs or take corrective actions as soon as practicable.

5. Specific Record Keeping Requirements:

a) Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any malfunction, shutdown, or startup, in the operation of the emissions unit, air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall compute and record percentage of COM data (excluding startup, shutdown and malfunction data) showing excursions above the opacity standard in each calendar quarter.

d) The permittee shall keep the results of all compliance tests.

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6. Specific Reporting Requirements:

a) Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install CEM systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

i) The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

ii) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

iii) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

iv) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments shall be reported.

b) Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported and defined as follows:

i) Excess emissions are defined as any six (6) minute period during which the average opacity of emissions exceeds twenty (20) percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

ii) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.

iii) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

iv) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

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c) The permittee shall report the number of excursions (excluding startup, shutdown, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

7. Specific Control Equipment Operating Conditions:

a) Equipment shall be operated as necessary to maintain compliance with permitted emission limitations, consistence with manufacturer's specifications and / or good operating practices.

b) Records regarding the maintenance of the control equipments shall be maintained.

c) See Section E for further requirements.

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Emissions Unit 08 Circulating Fluidized Bed Unit #3

Description:

Coal fired Circulating Fluidized Bed (CFB) boiler rating 2,500 mmBtu/hour,
Emission control units: baghouse, dry lime scrubber, and SNCR
No. 2 Fuel Oil used for startup and stabilization
Tire-Derived Fuel (TDF) 10% of coal fuel by weight ratio
Construction date: June 2002

Applicable Regulations:

401 KAR 59:016, New electric utility steam generating units.
401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Da, Standards of performance for electric utility steam generating units applicable to an emission unit with a capacity of more than 250 mmBtu/hr and commenced on or after September 19, 1978.
40 CFR 60, Appendix F, Quality Assurance Procedures
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.
401 KAR 51:160, NOx requirements for large utility and industrial boilers, incorporating by reference 40 CFR 96.
401 KAR 52:060, Acid rain permits, incorporating by reference the Federal Acid Rain provisions 40 CFR Parts 72 to 78.
40 CFR 63, Subpart B, Requirements for Control Technology Determinations with Major Sources in Accordance with Clean Air Act Sections, Sections 112 (g) and 112(j).
40 CFR 64, Compliance Assurance Monitoring
40 CFR Part 75, Continuous Emission Monitoring
401 KAR 63:020, Potentially hazardous matter or toxic substances

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control devices selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 59:016, Section 3(1)(b), and 401 KAR 51:017, particulate emissions shall not exceed 0.015 lb/mmBtu heat input based on a three-hour average. Pursuant to 401 KAR 59:016, Section 6(1), compliance with the 0.015 lb/mmBtu emission limitation shall constitute compliance with the 99% reduction requirement contained in 401 KAR 59:016, Section 3(1)(b).

b) Pursuant to 401 KAR 59:016, Section 3(2), emissions from this unit shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent is allowed for not more than one (1) six (6) minute per hour.

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c) Pursuant to 401 KAR 59:016, Section 4(1) and 401 KAR 51:017, sulfur dioxide emissions shall not exceed 0.20 lb/mmBtu based on a twenty-four (24) hour block average. Compliance with the twenty-four (24) hour average shall constitute compliance with the thirty (30) day rolling average contained in 401 KAR 59:016.

d) Pursuant to 401 KAR 51:017, carbon monoxide emissions shall not exceed 0.15 lb/mmBtu based on a thirty (30) day rolling average.

e) Pursuant to 401 KAR 51:017, nitrogen oxides emissions shall not exceed 0.07 lb/mmBtu based on a thirty (30) day rolling average. The NOx emission limit is waived for the specific SNCR optimization study activity as detailed in Section D (8 and 9). Should the optimization study indicate that 0.07 lb/mmBtu is unachievable, the NOx emissions rate shall be the optimized rate up to a maximum of 0.10 lbs/mmBtu.

f) Pursuant to 401 KAR 51:017, VOC emissions shall not exceed 0.0036 lb/mmBtu based on a thirty (30) day rolling average.

g) Pursuant to 401 KAR 51:017, mercury emissions shall not exceed 0.00000265 lb/mmBtu based on a quarterly average.

h) Pursuant to 401 KAR 51:017, fluoride emissions shall not exceed 0.0000466 lb/mmBtu based on a thirty (30) day rolling average.

i) Pursuant to 401 KAR 51:017, lead emissions shall not exceed 0.0000063 lb/mmBtu based on a quarterly average.

j) Pursuant to 401 KAR 51:017, beryllium emissions shall not exceed 0.0000146 lb/mmBtu based on a quarterly average.

k) Pursuant to 401 KAR 51:017, sulfuric acid mist emissions shall not exceed 0.005 lb/mmBtu based on a thirty (30) day average.

l) Pursuant to 401 KAR 59:016, Section 6(3), particulate matter and nitrogen oxides emission standards apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standard under Section 4 applies at all times except during periods of startup, shutdown, or malfunction.

m) Pursuant to 40 CFR. 63.43(d), case-by-case MACT determination for the Unit # 3 Boiler, shall not exceed the following hazardous air pollutants (HAP) emission limitations:

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HAP	Emissions Limitation (lb/mmBtu)
VOC	0.0036
Mercury	0.00000265
Hydrogen Chloride	0.0035
Hydrogen Fluoride	0.00047
Beryllium	0.0000146
Lead	0.0000063
Metal HAPS (as PM_{10})	0.015

3. Testing Requirements:

a) Pursuant to 401 KAR 50:055, Section 2, the permittee shall demonstrate compliance with the applicable emission standards within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility. Opacity data from the Continuous Opacity Monitor (COM) during the performance test for particulate shall be correlated with the particulate emissions rate to establish an average opacity level pursuant to Condition 4.b below.

b) If no additional stack tests are performed pursuant to Condition 4.b, the permittee shall conduct a performance test for particulate emissions within the third year after demonstrating compliance with the allowable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

d) See Section D

e) Case-by-Case MACT

Pursuant to 40 CFR 63.43(g)(2)(ii), case-by-case MACT determination, and 40 CFR.70.6(c), the permittee shall demonstrate compliance with the applicable emissions limitations for the following HAPs:

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HAP	Emissions Limitation	Compliance Method
VOC (VOC HAPs)	0.0036 lb/mmBtu	Method 25A
Mercury	0.00000265 lb/mmBtu	Method 29
Hydrogen Chloride	0.0035 lb/mmBtu	Method 26A
Hydrogen Fluoride	0.00047 lb/mmBtu	Method 26A
Beryllium	0.0000146 lb/mmBtu	Method 29
Lead	0.0000063 lb/mmBtu	Method 29
Metal HAPs (as PM_{10})	0.015 lb/mmBtu	Method 5

f) Pursuant to 40 CFR 63.43(g)(2)(ii) case-by case MACT determination, and 40 CFR 70.6(c), the permittee shall demonstrate compliance with these emissions limitations within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup of the emissions unit. See Section G(d)5

g) During the initial compliance test, the permittee shall take a sample of the fuel "as fired" and analyze it to determine the HAP content in the fuel. This information shall be used to establish a correlation between the sample's HAP content and HAP emissions for monitoring purposes. The permittee shall demonstrate compliance with these emission limits each year to validate the correlation between grab samples HAP content and HAP emissions. After three years of demonstrating compliance and the correlation between the samples and emissions, the permittee may petition the Division to use the grab samples as a surrogate for compliance testing.

4. <u>Specific Monitoring Requirements</u>:

a) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7 and 401 KAR 59:005, Section 4, the permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, carbon monoxide emissions, and either oxygen or carbon dioxide emissions. Oxygen or carbon dioxide shall be monitored at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with the requirements of 401 KAR 59:005, Section 4. Compliance with the Continuous Emission Monitoring provisions of 40CFR 75 will constitute compliance with the monitor requirements of 401 KAR 59:016.

b) Pursuant to 401 KAR 52:020, Section 10, 401 KAR59:016, Section 7(1), to meet the compliance assurance monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). The average opacity level determined pursuant to Condition 3.a above, plus 5% opacity will become the opacity trigger level.

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Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity (averaged over a period of 3 hours) value exceeds the opacity trigger level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over a three hour period) recorded in a calendar quarter show excursions above the opacity trigger level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (a)(19) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

c) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(1), the permittee shall use a continuous opacity monitor (COM). The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a daily basis and maintain a log of the observations. If visible emissions from the stack are seen, the permittee shall determine the opacity of emissions by Reference Method 9, or by accepting the concurrent read out from the COM and instigating an inspection of the control equipment and making any necessary repairs. If no visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any six consecutive week period, the frequency of observation may be reduced to weekly. Observations shall revert to daily if visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any weekly observation. Daily observations shall continue until such time that no visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any three consecutive week period.

d) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(2), to meet the compliance assurance monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 24-hour block average sulfur dioxide value exceeds that standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the CEM system and make any necessary repairs as soon as practicable.

e) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(3), to meet the compliance assurance monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 30 day rolling average nitrogen oxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or CEM system and make any necessary repairs or take any corrective actions as soon as practicable.

f) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 51:017, and 401 KAR 59:016, Section 7(2), the permittee shall monitor sulfur dioxide emissions at the outlet of the dry lime scrubber using a continuous monitoring system.

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g) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(3), to meet the continuous monitoring requirement for carbon monoxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 30 day rolling average carbon monoxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the unit and/or CEM system and make any necessary repairs or take any corrective actions as soon as practicable. The carbon monoxide CEM system shall be operated and maintained in accordance with Performance Specification 4 of Appendix B to 40 CFR 60 filed by reference in 401 KAR 50:015.

h) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(5), all the continuous emission monitoring systems shall be operated and data shall be recorded during all periods of operation of the emissions unit including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

i) Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 59:016, Section 7(6), when emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emission data by using other monitoring systems as approved by the Division or the reference methods as described in 401 KAR 59:016, Section 7(8) to provide emission data for a minimum of eighteen hours in at least twenty-two out of thirty successive boiler operating days.

j) Pursuant to 401 KAR 59:016, Section 7(9), the following procedures shall be used to conduct monitoring system performance evaluations and calibration checks as required under 401 KAR 59:005, Section 4(3).

1) Reference Method 6, 7, or 10 as applicable shall be used for conducting performance evaluations of sulfur dioxide, nitrogen oxides and carbon monoxide continuous emission monitoring systems.

2) Sulfur dioxide or nitrogen oxides, as applicable, shall be used for preparing calibration mixtures under Performance Specification 2 of Appendix B to 40 CFR 60 filed by reference in 401 KAR 50:015.

3) The span value for the continuous monitoring system for measuring opacity shall be between sixty (60) and eight (80) percent and the span value for the continuous monitoring system for measuring nitrogen oxides shall be as specified in 40 CFR 75, Appendix A.

4) The span value for the continuous monitoring system for measuring sulfur dioxide the outlet of the control device shall be 50 percent of the maximum estimated hourly potential emissions of the fuel fired or span value specified in 40 CFR 75, Appendix A.

k) The permittee shall take a grab sample of the fuel “as fired” to the CFB on a quarterly basis. The samples taken on a quarterly basis shall be analyzed to determine beryllium

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content. The samples taken on a quarterly basis shall also be analyzed to determine the applicable hazardous air pollutant content. This data, along with the baseline data established during the initial compliance test, shall be used to demonstrate compliance with the emission limits for these pollutants. Depending on the results of the quarterly tests, additional steps may be required to ensure that applicable hazardous air pollutant content emission limits are not exceeded.

l) The permittee shall monitor and record the TDF tonnage and 10% tire to coal ratio for fuel usage on a monthly basis.

m) CAM Requirements

The permittee shall use Sulfur Dioxide (SO2) and Nitrogen Oxides (NOx) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods to preclude applicability of 40CFR 64 for those specific parameters, and to demonstrate compliance with Best Available Control Technology (BACT) limits contained in this permit.

1) The permittee shall conduct the monitoring and fulfill the other obligations specified in C.F.R. §§ 64.7 through 64.9.

2) Pursuant to 40CFR 64.6, the table below shows the monitoring approach for PM.

CAM Requirement	PM/PM_{10} limits
General Requirements	0.015 lb/mmBtu filterable particulates, 20% Opacity
Monitoring Methods and Location	Initial Source Test & (1) installation of a COM at outlet of the baghouse and monitoring of the baghouse pressure drop and other relevant parameters identified during initial testing or (2) visual observation of plume from stack
Indicator Range	(1) Initial source testing to establish COM and equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) Initial source testing to establish compliance with the PM limit at 20% opacity. The permittee must conduct daily stack observations. If visible emissions are seen, the permittee must conduct a Method 9 observation to determine the opacity of the emissions or shall accept the concurrent read-out from the COM.
Data Collection Frequency	(1) COM and control device operating parameters or (2) daily observations
Averaging Period	(1) Opacity – 6 minute averages or (2) Visible Emission Surveys – 6 minutes
Recordkeeping	COM data system records and control device parameters will be maintained for a period of 5 years. Visible observation records and method 9 observations will be kept in a designated logbook and maintained for a period of 5 years.
QA/QC	COM will be maintained and operated in accordance with 401KAR 59:005 / 40CFR 60 Appendix B and other requirements as applicable. Baghouse monitored parameters will be maintained and operated in accordance with manufacturer recommendations; or records of Method 9 certifications will be maintained

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Case-by- Case MACT

Pursuant to 63.43(g) case-by-case MACT determination, the permittee shall conduct the following monitoring to assure compliance with the applicable requirements:

HAP	Emissions Limitation lb/mmBtu	Monitoring Method
VOC (VOC HAPs)	0.0036	The continuous compliance monitoring method used to assess compliance with the carbon monoxide emission limitation shall be used as an indicator of good combustion practices. Compliance with the carbon monoxide emission limitation assures compliance with the VOC (VOC HAP) emission limit.
Mercury	0.00000265	The permittee shall take a sample of fuel "as fired" to the boiler on a quarterly basis. The samples taken on a quarterly basis shall be analyzed to determine mercury content. Emissions shall be estimated based on the emission correlations established during the most recent stack test. The continuous compliance monitoring method used to assess compliance with the carbon monoxide emission limitation shall be used as an indicator of good combustion practices. The continuous compliance monitoring method used to assess compliance with the sulfur dioxide emission limitations shall also be used as an indicator or the proper dry lime scrubber operational procedures. Compliance with the carbon monoxide and sulfur dioxide emission limitations assures compliance with the mercury emission limit.
Hydrogen Chloride	0.0035	The continuous compliance monitoring method used to assess compliance with the sulfur dioxide emission limitations shall be used to assure compliance with the hydrogen chloride emission limit. Compliance with the sulfur dioxide emission limitations assures compliance with the hydrogen chloride emissions limit.
Hydrogen Fluoride	0.00047	The continuous compliance monitoring method used to assess compliance with the sulfur dioxide emission limitations shall be used to assure compliance with the hydrogen fluoride emission limit. Compliance with the sulfur dioxide emission limitations assures compliance with the hydrogen fluoride emissions limit.
Lead	0.0000063	Same as beryllium

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HAP	Emissions Limitation Lb/mmBtu	Monitoring Method
Beryllium	0.0000146	The permittee shall take a sample of fuel "as fired" to the coal-fired boiler on a quarterly basis. The samples taken on a quarterly basis shall be analyzed to determine beryllium. Emissions shall be estimated based on the emission correlations established during the most recent stack test. [The continuous compliance monitoring method used to assess compliance with the PM emission limitations shall be used to assure compliance with the beryllium emission limit as an indicator of proper operation and removal of beryllium from the exhaust stream.]
Metal HAPs	0.015	The continuous compliance monitoring method used to assess compliance with the PM emission limitations shall be used to assure compliance with the metal HAPs emission limit as an indicator of proper operation and removal of metal HAPs from the exhaust stream. Compliance with the PM emission limitation assures compliance with the metal HAPs emissions limit.

n) Pursuant to 40 CFR 63.43 (g)(2)(ii), case-by-case MACT determination, 40 CFR 70.6(a)(3)(i)(B), and 40 CFR 64.6(c)(1), the permittee shall conduct a compliance demonstration each year to validate the correlation between the coal samples HAP content and HAP emissions. The test procedure shall consist of taking grab samples of coal "as-fired" concurrent with the compliance demonstration to correlate the HAP content of coal with the HAP emissions. The coal samples shall be analyzed for HAP content and the correlation with the HAP emissions shall be established based on the analyzed HAP content and stack emissions.

5. Specific Record Keeping Requirements:

a) Pursuant to 401 KAR 59:005, Section 3(4), the owner or operator of the CFB shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

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c) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity trigger level in each calendar quarter.

d) The permittee shall maintain the results of all compliance tests.

e) Case-by-Case MACT

i) Pursuant to 40 CFR 63.43(g)(2)(ii), the permittee shall keep quarterly records of the sample's HAP analyses. The permittee shall keep these records according to the general recordkeeping requirements specified in Section F.1. and F.2. of this permit.

ii) Pursuant to 40 CFR 63.43(g)(2)(ii), the permittee shall record continuously the SO2 emission rate at the outlet of the dry lime scrubber using the CEM system.

iii) Pursuant to 40 CFR 63.43(g)(2)(ii), the permittee shall record continuously the opacity of visual emissions at the outlet of the baghouse using the COM system.

iv) Pursuant to 40 CFR 63.43(g)(2)(ii), the permittee shall record continuously the carbon monoxide emission rate using the CEM system.

f) The permittee shall maintain usage records of TDF for fuel.

6. <u>Specific Reporting Requirements:</u>

a) Pursuant to 401 KAR 59:005, Section 3(3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division for Air Quality. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide, nitrogen oxides and carbon monoxide monitors. The hourly averages shall be made available in the format specified by the Division for Air Quality.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

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4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

6) For sulfur dioxide and nitrogen oxides, all information listed in 401 KAR 59:016, Section 9(2)(a-i) shall be reported for each twenty-four (24) hour period.

7) If the minimum quantity of emission data as required by 401 KAR 59:016, Section 7(6)(a-e) is not obtained for any thirty successive boiler operating days, the permittee shall report all the information listed in 401 KAR 59:016, Section 9(3) for that thirty day period.

8) If any sulfur dioxide standards as specified in 401 KAR 59:016, Section 4(a and b) are exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement including all information as described in 401 KAR 59:016, Section 9(4).

9) For any periods for which opacity, sulfur dioxide, nitrogen oxides or carbon monoxide emissions data are not available, the permittee shall submit a signed statement pursuant to 401 KAR 59:016, Section 9(6) indicating if any changes were made in the operation of the emission control system during the period of data unavailability. Operations of control system and emissions unit during periods of data unavailability are to be compared with operation of the control system and emissions unit before and following the period of data unavailability.

10) The permittee shall submit a signed statement including all information as described in 401 KAR 59:016, Section 9(7).

11) Pursuant to 401 KAR 59:016, Section 9(8), for the purposes of the reports required under 401 KAR 59:005, Section 4, periods of excess emissions are defined as all six (6) minute periods during which the average opacity exceeds the applicable opacity standards as specified in Subsection 2 of this section. Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Division each calendar quarter.

b) Pursuant to 401 KAR 59:005, Section 3(3), the permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity trigger level, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity trigger level in each calendar quarter to the Division Regional Office.

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CAM Requirements

c) Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information according to the general reporting requirements specified in Section F.5. of this permit:

1) Number of exceedances or excursions;
2) Duration of each exceedance or excursion;
3) Cause of each exceedance or excursion;
4) Corrective actions taken on each exceedance or excursion;
5) Number of monitoring equipment downtime incidents;
6) Duration of each monitoring equipment downtime incident;
7) Cause of each monitoring equipment downtime incident;
8) Description of actions taken to implement a quality improvement plan for operating and monitoring, and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances and downtimes.

7. Specific Control Equipment Operating Conditions:

a) The CFB, baghouse, SNCR, and dry lime scrubber shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices. Compliance with this condition for particulate matter is in accordance with the CAM submittal for this unit.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

d) Case-by-Case MACT

Pursuant to 40 CFR §63.43(d), the permittee shall install and operate the following control technology to meet the case-by-case MACT emission limitations while the emission unit is in operation:

HAP	**Control Technology**
Mercury	Selective non-catalytic reduction (SNCR), dry lime scrubber, baghouse
Beryllium, Lead	Baghouse
Acid Gases (Hydrogen Chloride and Hydrogen Fluoride)	Flash dryer absorber and baghouse
Metals (Metal HAPs)	Baghouse

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e) Control Equipment Operating Conditions for the dry lime scrubber:

Pursuant to 40 CFR 63.43(g)(2)(ii), case-by-case MACT determination, 40 CFR 70.6(a)(3)(i)(B), and 40 CFR 64.6(c)(2), the permittee shall monitor SO_2 emissions continuously using the CEM system. Compliance with the SO_2 emissions limitation assures proper operation of the **dry lime scrubber**.

f) Control Equipment Operating Conditions for the baghouse:

Pursuant to 40 CFR 63.43(g)(2)(ii), case-by-case MACT determination, 40 CFR 70.6(a)(3)(i)(B), and 40 CFR 64.6(c)(2), the permittee shall maintain the opacity of visual emissions to less than 20 % as measured by the COM system. Compliance with the opacity limitation assures proper operation of the baghouse.

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Emissions Unit 17 Circulating Fluidized Bed Unit #4

Description:

Coal fired Circulating Fluidized Bed (CFB) boiler rating 2800 mmBtu/hr (or 300 MWh)
Emissions control units: Baghouse, dry lime scrubber, and SNCR
ASTM Grade No.2-DS15 fuel oil, used for startup and stabilization
Construction Commence Date: April 2006

Applicable Regulations:

401 KAR 59:016, New electric utility steam generating units.
401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Da, Standards of performance for electric utility steam generating units applicable to an emission unit with a capacity of more than 250 mmBtu/hr and commenced on or after September 19, 1978.
401 KAR 51:160, NO_x requirements for large utility and industrial boilers; incorporating by reference 40 CFR 96;
401 KAR 52:060, Acid rain permits, incorporating by reference the Federal Acid Rain provisions as codified in 40 CFR Parts 72 to 78;
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.
40 CFR Part 64, Compliance Assurance Monitoring (for NOx, PM/PM_{10}, and SO_2).
40 CFR Part 75, Continuous Emission Monitoring
401 KAR 63:020, Potentially hazardous matter or toxic substances

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control devices selected as BACT. The owner or operator shall install control devices selected as BACT.

- BACT for PM/PM_{10} is PJFF.
- BACT for CO is good combustion controls.
- BACT for H_2SO_4 mist is a Dry Scrubbers and Lime stone Injection .
- BACT for fluorides (as HF) is a PJFF and Dry Scrubbers .
- BACT for NO_x is a CFB and SNCR.
- BACT for SO_2, is a CFB with SNCR.
- Only ASTM Grade No.2-DS15 fuel oil, with a sulfur content not to exceed 15 ppm shall be used for startup and stabilization.

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2. Emission Limitations:

a) Pursuant to 401 KAR 59:016, Section 3(1)(b), and 401 KAR 51:017, particulate matter (PM, filterable) emissions shall not exceed 0.009 lb/mmBtu heat input based on 30 day CEM, and total particulates shall not exceed 0.012 lb/mmBtu based on a 3 hour performance test. Pursuant to 401 KAR 59:016, Section 6(1), compliance with the 0.009 lb/mmBtu (filterable) emission limitation shall constitute compliance with the 99% reduction requirement contained in 401 KAR 59:016, Section 3(1)(b).

b) Pursuant to 401 KAR 60:005, Section 3(1)(c) and 40 CFR 60.42a(c), [per proposed revisions to NSPS Subpart Da published in the Federal Register on February 28, 2005] filterable particulate emissions shall not exceed 0.015 lb/mmBtu of heat input based on 3 hour average.

c) Pursuant to 401 KAR 59:016, Section 3(2), emissions from this unit shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent is allowed for not more than one (1) six (6) minute per hour.

d) Pursuant to 401 KAR 59:016, Section 4(1) and 401 KAR 51:017, sulfur dioxide (SO2) emissions shall not exceed 0.15 lb/mmBtu based on a twenty-four (24) hour block average. Compliance with the twenty-four (24) hour average shall constitute compliance with the thirty (30) day rolling average contained in 401 KAR 59:016.

e) Pursuant to 401 KAR 60:005, Section 3(1)(c) and 40 CFR 60.43a(i), [per proposed revisions to NSPS Subpart Da published in the Federal Register on February 28, 2005], sulfur dioxide emissions shall not exceed 2.0 lb/MWh gross energy output, based on 3 hour average. Pursuant to 401 KAR 59:016, Section 4, compliance with this limit shall constitute compliance with the 70% reduction requirement contained in 401 KAR 59:016, Section 4(1)(b).

f) Pursuant to 401 KAR 51:017, carbon monoxide (CO) emissions shall not exceed 0.10 lbs/mmBtu based on a thirty day rolling average.

g) Pursuant to 401 KAR 51:017, nitrogen oxides emissions shall not exceed 0.07 lb/mmBtu based on a thirty (30) day rolling average. The NO_X emission limit is waived for the specific SNCR optimization study activity as detailed in Section D (6 and 7). Should the optimization study indicate that 0.07 lbs/mmBtu is unachievable, then a significant revision to the permit will be required. Under no case will the revised limit be greater than 0.09 lbs/mmBtu.

h) Pursuant to 401 KAR 60:005, Section 3(1)(c) and 40 CFR 60.44a(e), [per proposed revisions to NSPS Subpart Da published in the Federal Register on February 28, 2005], nitrogen oxides emissions, (expressed as NO2) shall not exceed 1.0 lb/MWh gross energy output, based on a 30-day rolling average. Pursuant to 401 KAR 59:016, Section 5, compliance with this limitation shall constitute compliance with the 65% reduction requirement contained in 401 KAR 59:016, Section 5(2)(c).

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i) Pursuant to 401 KAR 51:017, VOC emissions shall not exceed 0.002 lb/mmBtu based on three (3) hour rolling average. Compliance with this limit shall be demonstrated by compliance with Subsection 2(f) above

j) Pursuant to 40 CFR 60.45a., mercury emissions shall not exceed 21 x 10-6 lbs/MWh (Gross output) based on a consecutive twelve (12) month rolling average when burning only coal. If the units burns Tire Derived fuel, the permitted mercury must meet the reduced allowable calculated using Equation 1 of 40 CFR 60.45a.

k) Pursuant to 401 KAR 51:017, fluoride emissions shall not exceed 0.000047 lb/mmBtu based on a three hour rolling average.

l) Pursuant to 401 KAR 51:017, sulfuric acid mist emissions shall not exceed 0.005 lb/mmBtu based on a three-hour average.

m) Pursuant to 401 KAR 63:020, the use of good combustion controls, Baghouse, dry lime scrubber, and SNCR shall be used for the control of toxic substances.

n) Compliance with emission limits in Subsections (a), (d), (f) and (l) shall constitute compliance with 401 KAR 63:020 with respect to toxic substances.

o) Pursuant to 401 KAR 401 KAR 59:016 Section 6(3), PM and NOx emission standards apply at all times except during periods of startup, shutdown or malfunction. The sulfur dioxide emission standard under Section 4 applies at all times except for periods of startup, shutdown or malfunction. Pursuant to 401 KAR 51:017, the owner or operator shall utilize good work and maintenance practices and manufacturer's recommendations to minimize emissions during, and the frequency and duration of, such events.

3. Testing Requirements:

a) Pursuant to 401 KAR 50:055, Section 2, the permittee shall demonstrate compliance with the applicable emission standards within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility.

b) During the initial compliance test, the permittee shall take a sample of the fuel "as fired" and analyze it using ASTM methods to determine the fluoride content in the fuel. This information shall be used to establish a correlation between the sample's fluoride content and HF emissions for monitoring purposes. The permittee shall demonstrate compliance with these emission limits each year to validate the correlation between coal samples and HF emissions. After three years of demonstrating compliance and the correlation between the samples and emissions, the permittee may petition the Division to use the grab samples as a surrogate for compliance testing.

c) See Section D

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4. Specific Monitoring Requirements:

a) Pursuant to 401 KAR 60:005, Section 3(1)(c); 401 KAR 52:020, Section 10; 401 KAR 59:016, Section 7; and 401 KAR 59:005, Section 4, the permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, carbon monoxide emissions, mercury , particulate matter and either oxygen or carbon dioxide emissions. Oxygen or carbon dioxide shall be monitored at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with the requirements of 401 KAR 59:005, Section 4. Compliance with the Continuous Emission Monitoring provisions of 40CFR 75 will constitute compliance with the monitor requirements of 401 KAR 59:016.

b) Pursuant to 401 KAR 52:020, Section 10, and 401 KAR59:016, Section 7(1), to meet the compliance assurance monitoring requirement for particulate matter, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 3-hour or 30 day average value exceeds that standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the CEM system and make any necessary repairs as soon as practicable.

c) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(1), the permittee shall use a continuous opacity monitor (COM). The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a daily basis and maintain a log of the observations. If visible emissions from the stack are seen, the permittee shall determine the opacity of emissions by Reference Method 9, or by accepting the concurrent read out from the COM and instigating an inspection of the control equipment and making any necessary repairs. If no visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any six consecutive week period, the frequency of observation may be reduced to weekly. Observations shall revert to daily if visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any weekly observation. Daily observations shall continue until such time that no visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any three consecutive week period.

d) Pursuant to 401 KAR 52:020, 401 KAR 59:016, Section 7(2) and 40 CFR 75.2, to meet the continuous monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 24-hour block average sulfur dioxide value exceeds that standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the CEM system and make any necessary repairs as soon as practicable.

e) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 59:016, Section 7(3) and 40 CFR 75.2, to meet the continuous monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 30 day rolling average nitrogen oxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or

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CEM system and make any necessary repairs or take any corrective actions as soon as practicable.

f) Pursuant to 401 KAR 52:020, Section 10, 401 KAR 51:017, and 401 KAR 59:016, Section 7(2), the permittee shall monitor sulfur dioxide emissions at the outlet of the dry lime scrubber using a continuous monitoring system.

g) Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 59:016, Section 7(3), to meet the continuous monitoring requirement for carbon monoxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 30 day rolling average carbon monoxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the unit and/or CEM system and make any necessary repairs or take any corrective actions as soon as practicable. The carbon monoxide CEM system shall be operated and maintained in accordance with Performance Specification 4 of Appendix B to 40 CFR 60 filed by reference in 401 KAR 50:015.

h) Pursuant to 401 KAR 52:020, Section 10 and 40 CFR 60.49a(p), to meet the continuous monitoring requirements for mercury the permittee shall use a mercury CEMs.

i) Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 59:016, Section 7(5), all the continuous emission monitoring systems shall be operated and data shall be recorded during all periods of operation of the emissions unit including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

j) Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 59:016, Section 7(6), when emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emission data by using other monitoring systems as approved by the Division or the reference methods as described in 401 KAR 59:016, Section 7(8) to provide emission data for a minimum of eighteen hours in at least twenty-two out of thirty successive boiler operating days.

k) Pursuant to 401 KAR 59:016, Section 7(9), the following (1-4) procedures shall be used to conduct monitoring system performance evaluations and calibration checks as required under 401 KAR 59:005, Section 4(3).

1) Reference Method 6, 7, or 10 as applicable shall be used for conducting performance evaluations of sulfur dioxide, nitrogen oxides and carbon monoxide continuous emission monitoring systems.

2) Sulfur dioxide or nitrogen oxides, as applicable, shall be used for preparing calibration mixtures under Performance Specification 2 of Appendix B to 40 CFR 60 filed by reference in 401 KAR 50:015.

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3) The span value for the continuous monitoring system for measuring opacity shall be between sixty (60) and eight (80) percent and the span value for the continuous monitoring system for measuring nitrogen oxides shall be as specified in 40 CFR 75, Appendix A.

4) The span value for the continuous monitoring system for measuring sulfur dioxide at the outlet of the control device shall be 50 percent of the maximum estimated hourly potential emissions of the fuel fired, or span values as specified in 40 CFR 75, Appendix A.

l) The permittee shall monitor and record the TDF tonnage and 10% tire to coal ratio for fuel usage on a monthly basis.

m) **CAM Requirements:** The owner or operator shall use sulfur dioxide (SO_2), nitrogen oxides (NO_x), and particulate matter (PM/PM_{10}) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods consistent with 40 CFR 64.4(d) for those specific parameters, and to demonstrate compliance with Best Available Control Technology (BACT) limits contained in this permit, as applicable.

Pursuant to 40 CFR 64.6, monitoring for H_2SO_4 is shown in the table below:

CAM MONITORING APPROACH

Applicable CAM Requirement	H_2SO_4 Mist
General Requirements	0.005 lb/mmBtu 3 hour rolling average
Monitoring Methods and Location	SO_2 CEMs plus initial source test. Monitor rate of Limestone Injection in conjunction with initial source tests to establish excursion and exceedance levels.
Indicator Range	Initial source testing to establish correlation to SO_2 and limestone injection rate to Sulfuric Acid Mist emissions.
Data Collection Frequency	Continuous SO_2 CEM and limestone injection rate
Averaging Period	3-hour rolling
Recordkeeping	CEM data system, limestone injection
QA/QC	DS/Limestone injection rates will be maintained and operated in accordance with manufacturer specifications and recommendations

5. <u>Specific Record Keeping Requirements:</u>

a) Pursuant to 401 KAR 59:005, Section 3(4), the owner or operator of the CFB shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device

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calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity trigger level in each calendar quarter.

d) The permittee shall maintain the results of all compliance tests, and:

1) Pursuant to 401 KAR 52:020, Section 10, and 40 CFR 64.9(b), the permittee shall record continuously the SO2 emission rate at the outlet of the dry lime scrubber using the CEM system.

2) Pursuant to 401 KAR 52:020, Section 10, the permittee shall record continuously the opacity of visual emissions at the outlet of the baghouse using the COM system.

3) Pursuant to 401 KAR 52:020, Section 10, and 40 CFR 64.9(b), the permittee shall record continuously the PM emissions at the outlet of the baghouse using a PM-CEM system.

4) Pursuant to 401 KAR 52:020, Section 10, the permittee shall record continuously the carbon monoxide emission rate using the CEM system.

5) The permittee shall record the TDF usage for fuel.

6. <u>Specific Reporting Requirements:</u>

a) Pursuant to 401 KAR 59:005, Section 3(3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division for Air Quality. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

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2) All hourly averages shall be reported for sulfur dioxide, nitrogen oxides, particulate and carbon monoxide monitors. The hourly averages shall be made available in the format specified by the Division for Air Quality.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

6) For sulfur dioxide and nitrogen oxides, all information listed in 401 KAR 59:016, Section 9(2)(a-i) shall be reported for each twenty-four (24) hour period.

7) If the minimum quantity of emission data as required by 401 KAR 59:016, Section 7(6)(a-e) is not obtained for any thirty successive boiler operating days, the permittee shall report all the information listed in 401 KAR 59:016, Section 9(3) for that thirty day period.

8) If any sulfur dioxide standards as specified in 401 KAR 59:016, Section 4(a and b) are exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement including all information as described in 401 KAR 59:016, Section 9(4).

9) For any periods for which opacity, sulfur dioxide, nitrogen oxides or carbon monoxide emissions data are not available, the permittee shall submit a signed statement pursuant to 401 KAR 59:016, Section 9(6) indicating if any changes were made in the operation of the emission control system during the period of data unavailability. Operations of control system and emissions unit during periods of data unavailability are to be compared with operation of the control system and emissions unit before and following the period of data unavailability.

10) The permittee shall submit a signed statement including all information as described in 401 KAR 59:016, Section 9(7).

11) Pursuant to 401 KAR 59:016, Section 9(8), for the purposes of the reports required under 401 KAR 59:005, Section 4, periods of excess emissions are defined as all six (6) minute periods during which the average opacity exceeds the applicable opacity standards as specified in Subsection 2 of this section. Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Division each calendar quarter.

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12) Pursuant to 40 CFR §60. 51 (a), mercury emissions data shall be reported quarterly to the Division's Regional Office.

b) Pursuant to 401 KAR 59:005, Section 3(3), the permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity trigger level, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity trigger level in each calendar quarter to the Division's Regional Office.

c) CAM Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information according to the general reporting requirements specified in Section F.5. of this permit:

1) Number of exceedances or excursions;
2) Duration of each exceedance or excursion;
3) Cause of each exceedance or excursion;
4) Corrective actions taken on each exceedance or excursion;
5) Number of monitoring equipment downtime incidents;
6) Duration of each monitoring equipment downtime incident;
7) Cause of each monitoring equipment downtime incident;
8) Description of actions taken to implement a quality improvement plan for operating and monitoring, and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances and downtimes.

7. <u>Specific Control Equipment Operating Conditions:</u>

a) The CFB, baghouse, SNCR, and dry lime scrubber shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices. Compliance with this condition for particulate matter is in accordance with the CAM submittal for this unit.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

d) Control Equipment Operating Conditions for the dry lime scrubber:
Pursuant to 401 KAR 52:020, Section 10 and 40 CFR 64.6(c)(2), the permittee shall monitor SO2 emissions continuously using the CEM system. Compliance with the SO2 emissions limitation assures proper operation of the dry lime scrubber.

e) Control Equipment Operating Conditions for the baghouse:
Pursuant to 401 KAR 52:020, Section 10 and 40 CFR 64.6(c)(2), the permittee shall maintain the opacity of visual emissions to less than 20 % as measured by the COM system. Compliance with the PM limitation as measured by the PM-CEM indicates proper operation of the baghouse.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 04 - Coal Handling Operations

Description:

Transfer towers #1 & #2, reclaim hoppers, conveyor, crusher house, and conveyor drop points.
Operating rate: 4000 tons/hr
Construction commenced: 1981

Applicable Regulations:

401 KAR 60:005(ff), adopts by reference 40 CFR 60 Subpart Y, applicable to conveyors and crushers which process coal more than 200 tons/day, commenced after October 24, 1974.

1. Operating Limitations: None

2. Emission Limitations:

Pursuant to 401 KAR 60:005(ff), 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, emissions which exhibit 20 percent opacity or greater.

3. Testing Requirements:

Pursuant to 401 KAR 60:005(ff), 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity quarterly.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintained a log of the observation. If visible emissions from any stack are seen, the permittee shall determined the opacity of emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain the records of amount of coal received and processed.
b) The permittee shall maintain the result of all compliance tests.

6. Specific Reporting Requirements:
See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

7. Specific Control Equipment Operating Conditions:

a) The control equipment enclosures, wet suppression, and baghouses used to control particulate emissions shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and / or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 06 Two fly ash silos (Truck loadout)

Description:

The maximum loading rate: 300 tons/hr.
Construction commenced: 1993

Applicable Regulations:

401 KAR 63:010, Fugitive emissions.

Applicable Requirements:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

1. Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts; and,

2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations: None

2. Emission Limitations: None

3. Testing Requirements: None

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of ash processed.

5. Specific Record Keeping Requirements:

Records of the ash processed shall be maintained.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

7. Specific Control Equipment Operating Conditions:

a) The enclosures and water spray system shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and / or standard engineering practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 07 - Coal Handling Operations

Description:

Rotary railcar unloader, barge unloader, sampling tower, radial stacker off-loading onto coal pile, haul roads, and yard area.
Operating rate: 4,600 tons/hr
Construction commenced: Prior 1970

Applicable Regulations:
401 KAR 63:010, Fugitive emissions.

Applicable Requirements:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

1. Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of
dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:
None

2. Emission Limitations:
None

3. Testing Requirements:
None

4. Specific Monitoring Requirements:
The permittee shall monitor the amount of coal received and processed.

5. Specific Record Keeping Requirements:
Records of the amount of coal received and processed shall be maintained.

6. Specific Reporting Requirements:
See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

7. Specific Control Equipment Operating Conditions:

a) The control equipment (including but not limited to hoods, enclosures, use of dust suppressant/foam, telescopic chute, and water spray system) shall be operated as necessary to maintain compliance with applicable requirements in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

d) See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 09 Coal Storage Pile

Description:

For unit 03 and Unit 04 Coal Storage Pile

Control Equipment: Wet Suppression, Telescopic Chute, or Dust Suppressant
Operating Rate: 750 tons/hour
Construction Commenced Date: February 8, 2002

Applicable Regulations:
401 KAR 63:010, Fugitive emissions
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from become airborne. Such reasonable precautions shall include, when applicable, but not limited to the following:

1) application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dust; and

2) installation and use of compaction or other measures to suppress the dust emissions during handling; and

3) proper operation and maintenance of telescopic chutes to minimize emissions.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c) Pursuant to 401 KAR 51:017, the permittee shall install control methods selected as BACT. See above.

2. Emission Limitations:

None.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor application of wet suppression or dust suppressant as required by BACT.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

The permittee shall maintain records of the amount of coal received and processed.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment (including, but not limited to, use of dust suppressant/foam, telescopic chute, and wet suppression) shall be operated as necessary to maintain compliance with applicable requirements of 401 KAR 51:017, and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 10 Coal Silos (4)

Description:

Machine Point 01 Coal Silos
Control Equipment: Baghouse
Operating Rate: 750 tons/hour
Construction Commenced Date: February 8, 2002

Applicable Regulations:

401 KAR 60:005(ff), which incorporates by reference 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants.
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control methods selected as BACT.

2. Emission Limitations:

a) Pursuant to 40 CFR 60.252, the owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

b) Pursuant to 401 KAR 51:017, the baghouse utilized shall exhibit a design control efficiency of at least 99 %.

3. Testing Requirements:

Pursuant to 40 CFR 60.254, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division for Air Quality.

4. Specific Monitoring Requirements:

The permittee must conduct weekly stack observations and maintain a log of the observations. If visible emissions are seen, the permittee must conduct a Method 9 observation to determine the opacity of the emissions. If the 20% opacity standard is exceeded, averaged on three 6-minute readings, the permittee shall initiate an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) The permittee shall monitor the amount of coal received and processed.

b) The permittee shall maintain the results of all compliance tests. The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be maintained and operated as necessary to ensure the emission unit is in compliance with the applicable requirements of 40 CFR 60, Subpart Y and in accordance with manufacturer's specifications and/ or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

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Emissions Unit 11 Bed Ash Handling System

Description:

Machine Point 01 – Bed Ash Silo
Control Equipment: Baghouse
Operating Rate: 44 tons/hour
Construction Commenced Date: February 8, 2002

Applicable Regulations:

401 KAR 59:010, New Process Operations
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017 and 401 KAR 59:010, the permittee shall not cause to be discharged into the atmosphere from the above mentioned emissions units gases which exhibit twenty (20) percent opacity or greater.

b) Pursuant to 401 KAR 51:017, the baghouse utilized shall exhibit a design control efficiency of at least 99 %.

c) Pursuant to 401 KAR 59:010, particulate matter emissions shall not exceed 37.5 lbs/hr based on a three-hour average.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division for Air Quality.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division for Air Quality to determine particulate matter concentration

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain records of amount of ash processed.

b) The permittee shall maintain results of all compliance tests and calculations.

i) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

ii) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be maintained and operated as necessary to maintain compliance with permitted emission limitations contained in 401 KAR 59:010 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 12 Fly Ash Handling System

Description:

Machine Point 01 Fly Ash Silo

Control Equipment: Baghouse
Operating Rate: 71 tons/hour – Machine Point 01
Construction Commenced Date: February 8, 2002

Applicable Regulations:

401 KAR 59:010, New Process Operations
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017 and 401 KAR 59:010, the permittee shall not cause to be discharged into the atmosphere from the above mentioned emissions units gases which exhibit twenty (20) percent opacity or greater.

b) Pursuant to 401 KAR 51:017, the baghouse utilized shall exhibit a design control efficiency of at least 99 %.

c) Pursuant to 401 KAR 59:010, particulate matter emissions shall not exceed 50 lbs/hr based on a three-hour average.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division for Air Quality.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division for Air Quality to determine particulate matter concentration.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain records of amount of ash processed.

b) The permittee shall maintain results of all compliance tests and calculations.

i) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

ii) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be maintained and operated as necessary to maintain compliance with permitted emission limitations contained in 401 KAR 59:010 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 13 Limestone Prep System

Description:

Machine Point 01 – Limestone Thermal Drying
Machine Point 02 – Crushing
Control Equipment: Baghouse and Enclosure
Operating Rate: 30 tons/hour
Construction Commenced Date: February 8, 2002

Applicable Regulations:

401 KAR 60:670, incorporating 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, as modified by Section 3 of 401 KAR 60:670.

401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017, emissions of particulate shall be controlled by a baghouse with a design control efficiency of at least 99 %.

b) Pursuant to 401 KAR 60:670, emissions of particulate shall not exceed 0.05 gr/dscm and shall not exhibit greater than 7% opacity.

3. Testing Requirements:

a) Pursuant to 401 KAR 60:670, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division for Air Quality to determine particulate matter concentration.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance.

5. Reporting and Recordkeeping Requirements:

a) Reporting and Recordkeeping shall be done in compliance with the requirements contained within 401 KAR 60:670.

b) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

c) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

d) Records of the limestone processed (tonnage) shall be maintained.

e) See Section F, Conditions 5, 6, 7 and 8.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

a) The facilities and baghouse shall be maintained and operated to ensure the emission unit is in compliance with applicable requirements of 401 KAR 60:670 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 14 Limestone Storage

Description:

Machine Point 01 – Limestone Silo
Control Equipment: Baghouse
Operating Rate: 30 tons/hour
Construction Commenced Date: February 8, 2002

Applicable Regulations:

401 KAR 60:670, incorporating by reference 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, as modified by Section 3 of 401 KAR 60:670
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017, emissions of particulate shall be controlled by a baghouse with a design control efficiency of at least 99 %.

b) Pursuant to 401 KAR 60:670, emissions of particulate shall not exceed 0.05 gr/dscm and shall not exhibit greater than 7% opacity.

3. Testing Requirements:

a) Pursuant to 401 KAR 60:670, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance.

5. Reporting and Recordkeeping Requirements:

a) Reporting and Recordkeeping shall be done in compliance with the requirements contained within 401 KAR 60:670.

b) For visible emissions, the permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

c) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

d) Records of the limestone processed (tonnage) shall be maintained.

e) See Section F, Conditions 5, 6, 7 and 8.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

a) The facilities and baghouse shall be maintained and operated to ensure the emission unit is in compliance with applicable requirements of 401 KAR 60:670 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

a) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 15 Limestone Unloading

Description:

Machine Point 01 – Limestone Truck Dump
Control Equipment: Wet Suppression or Dust Suppressant
Operating Rate: 30 tons/hour
Construction Commenced Date: February 8, 2002

Applicable Regulations:

401 KAR 63:010, Fugitive emissions
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from become airborne. Such reasonable precautions shall include, when applicable, but not limited to the following:

1) application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dust; and

2) installation and use of compaction or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c) Pursuant to 401 KAR 51:017, the permittee shall install control methods selected as BACT. See above.

2. Emission Limitations:
None

3. Testing Requirements:
None

4. Specific Monitoring Requirements:

The permittee shall monitor fugitive emissions from the limestone truck dump as required by BACT.

5. Reporting and Recordkeeping Requirements:

Records of limestone processed (tonnage) shall be maintained.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment (including, but not limited to, use of dust suppressant/foam, and wet suppression) shall be operated as necessary to maintain compliance with applicable requirements of 401 KAR 63:010, and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 16 Cooling Tower

Description:

Control Equipment: 0.005% Drift Eliminators
Operating Rate: 2600 GPM
Construction Commenced Date: February 8, 2002

Applicable Regulations:

40 CFR 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers
401 KAR 63:010, Fugitive emissions
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

b) Pursuant to 40 CFR 63, Subpart Q, the permittee shall not use any chromium-based water treatment chemicals in the cooling tower

2. Emission Limitations:

a) The cooling towers shall utilize 0.005% Drift Eliminators.

b) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

3. Testing Requirements:
None

4. Specific Monitoring Requirements:
None

5. Reporting and Recordkeeping Requirements:

The permittee shall maintain the records of manufacturer design of the Drift Eliminators.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

7. Specific Control Equipment Operating Conditions:

a) The Drift Eliminators shall be operated in accordance with manufacturer's specifications and/or standard operating practices.

b) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 18 Coal Silos

Description:

Machine point 04 Coal Silos
Control Equipment: Baghouse with 99% emission control efficiency
Operating Rate: 750 tons/hour
Construction Commenced Date: 2006

Applicable Regulations:

401 KAR 60:005(ff), incorporates by reference 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants.
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

2. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control methods selected as BACT.

2. Emission Limitations:

a) Pursuant to 40 CFR 60.252, the owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

b) Pursuant to 401 KAR 51:017, the baghouse utilized shall exhibit a design control efficiency of at least 99 %, with a BACT limit of 0.10 lb/hr (or 0.00013 lb/ton).

3. Testing Requirements:

Pursuant to 40 CFR60.254, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division for Air Quality.

4. Specific Monitoring Requirements:

a) The permittee must conduct weekly stack observations and maintain a log of the observations. If visible emissions are seen, the permittee must conduct a Method 9 observation to determine the opacity of the emissions. If the 20% opacity standard is exceeded, averaged on three 6-minute readings, the permittee shall initiate an inspection of the control equipment for any necessary repairs.

b) The pressure drop across the baghouses will be monitored and recorded on a continuous basis and compared with the manufacture's specified operating range to ensure compliance.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) The permittee shall monitor the amount of coal received and processed.

b) The permittee shall maintain results of all compliance tests and calculations.

1) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

2) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be maintained and operated as necessary to ensure the emission unit is in compliance with the applicable requirements of 40 CFR 60, Subpart Y and in accordance with manufacturer's specifications and/ or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 19 (04) Bed Ash Handling System

Description:

Machine Point 04 – Bed Ash Silo
Control Equipment: Baghouse 99% emission control efficiency
Operating Rate: 44 tons/hour
Construction Commenced Date: 2006

Applicable Regulations:

401 KAR 59:010, New Process Operations
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

2. Operating Limitations:

Pursuant to 401 KAR 51:017, the permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 59:010, the permittee shall not cause to be discharged into the atmosphere from the above mentioned emissions units gases which exhibit twenty (20) percent opacity or greater.

b) Pursuant to 401 KAR 51:017, the baghouse utilized shall exhibit a design control efficiency of at least 99 %, with a BACT limit of 0.034 lb/ton.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division for Air Quality.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division for Air Quality to determine particulate matter concentration.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain records of amount of ash processed.

b) The permittee shall maintain results of all compliance tests and calculations.

1) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

2) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be maintained and operated as necessary to maintain compliance with permitted emission limitations contained in 401 KAR 59:010 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 20 (04) Fly Ash Handling System

Description:

Machine Point 04 Fly Ash Silo

Control Equipment: Baghouse 99% emission control efficiency
Operating Rate: 71 tons/hour
Construction Commenced Date: 2006

Applicable Regulations:

401 KAR 59:010, New Process Operations
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the Permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017 and 401 KAR 59:010, the permittee shall not cause to be discharged into the atmosphere from the above mentioned emissions units gases which exhibit twenty (20) percent opacity or greater.

b) Pursuant to 401 KAR 51:017, the baghouse utilized shall exhibit a design control efficiency of at least 99 %, with a BACT limit of 0.7 lb/ton (or 0.5 lb/hr).

c) Pursuant to 401 KAR 59:010, particulate matter emissions shall not exceed 35 lbs/hr based on a three-hour average.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division for Air Quality.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division for Air Quality to determine particulate matter concentration.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain records of amount of ash processed.

b) The permittee shall maintain results of all compliance tests and calculations.

1) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

2) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be maintained and operated as necessary to maintain compliance with permitted emission limitations contained in 401 KAR 59:010 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 21 Limestone Silo

Description:

Machine Point 04 – Limestone Silo
Control Equipment: Baghouse 99% emission control efficiency
Operating Rate: 30 tons/hour
Construction Commenced Date: 2002

Applicable Regulations:

401 KAR 60:670, incorporating by reference 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, as modified by Section 3 of 401 KAR 60:670.
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

Pursuant to 401 KAR 51:017, the Permittee shall install control equipment selected as BACT.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017, emissions of particulate shall be controlled by a baghouse with a design control efficiency of at least 99 %.

b) Pursuant to 401 KAR 60:670, emissions of particulate shall not exceed 0.02 gr/dscm (or 0.86 lb/hr) and shall not exhibit greater than 7% opacity.

3. Testing Requirements:

a) Pursuant to 401 KAR 60:670, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division for Air Quality to determine particulate matter concentration.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, then the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) The pressure drop across baghouses will be checked and recorded on a continuous basis and compared with the manufacturer's specified operating range to ensure compliance

5. Reporting and Recordkeeping Requirements:

a) Reporting and Recordkeeping shall be done in compliance with the requirements contained within 401 KAR 60:670.

b) The permittee shall record each week the date, time and opacity of the visible emissions monitoring. In case of an exceedance, the permittee must record the reason (if known) and the measures taken to minimize or eliminate the exceedance.

c) Pressure drop across the baghouses will be monitored through the use of a strip recorder or other continuous recording device. The permittee shall maintain strip recorder (or other continuous recording device) charts. In case of out-of-range indications, the permittee must log the date and time of the exceedance, the reason for the exceedance (if known) and the measures taken to correct the exceedance.

d) Records of the limestone processed (tonnage) shall be maintained.

e) See Section F, Conditions 5, 6, 7 and 8.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

a) The facilities and baghouse shall be maintained and operated to ensure the emission unit is in compliance with applicable requirements of 401 KAR 60:670 and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding maintenance of the control equipment shall be maintained.

a) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 22 Limestone Unloading

Description:

Machine Point 04 – Limestone Truck Dump
Control Equipment: Wet Suppression or Dust Suppressant 99% emission control efficiency
Operating Rate: 30 tons/hour
Construction Commenced Date: 2006

Applicable Regulations:

401 KAR 63:010, Fugitive emissions
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from become airborne. Such reasonable precautions shall include, when applicable, but not limited to the following:

1) application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dust; and
2) installation and use of compaction or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c) Pursuant to 401 KAR 51:017, the permittee shall install control methods selected as BACT. See above.

2. Emission Limitations:

See 1 above.

3. Testing Requirements:
None

4. Specific Monitoring Requirements:

The permittee shall monitor application of wet suppression or dust suppressant as required by BACT.

5. Reporting and Recordkeeping Requirements:

Records of limestone processed (tonnage) shall be maintained.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment (including, but not limited to, use of dust suppressant/foam, and wet suppression) shall be operated as necessary to maintain compliance with applicable requirements of 401 KAR 63:010, and in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 23 Cooling Tower

Description:

Generator Unit 04 Cooling Tower
Control Equipment: 0.0005% Drift Eliminators
Operating Rate: 2800 GPM
Construction Date projected: 2006

Applicable Regulations:

40 CFR 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers
401 KAR 63:010, Fugitive emissions
401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

Applicable Requirements:

1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

b) Pursuant to 40 CFR 63, Subpart Q, the permittee shall not use any chromium-based water treatment chemicals in the cooling tower.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017, the cooling tower shall utilize 0.0005% Drift Eliminators.

b) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

3. Testing Requirements:
Initial performance test to verify drift percent achieved by the drift eliminator will be conducted based on the Cooling Technology Institute (CTI) Acceptance Test Code (ATC) # 140

4. Specific Monitoring Requirements:

The permittee shall monitor total dissolved solids content of the circulating water on a monthly basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) The owner or operator shall maintain records of the manufacturer's design of the Drift Eliminators.

b) The owner or operator shall maintain records of maximum pumping capacity and monthly records of the total dissolved solids content

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) Pursuant to 401 KAR 50:055, Section 5, the drift eliminators shall be maintained and operated to ensure the emission units are in compliance with applicable requirements of 401 KAR 63:010 and in accordance with manufacturer's specifications and/or standard operating practices.

b) See Section E for further requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	Storage vessels containing petroleum or organic liquids with a capacity of less than 10,567 gallons, providing (a) the vapor pressure of the stored liquid is less than 1.5 psia at storage temperature, or (b) vessels greater than 580 gallons with stored liquids having greater than 1.5 psia vapor pressure are equipped with a permanent submerged fill pipe.	NA
2.	Storage vessels containing inorganic aqueous liquids, except inorganic acids with boiling points below the maximum storage temperature at atmospheric pressure.	NA
3.	#2 oil-fired space heaters or ovens rated at less than two million BTU per hour actual heat input, provided the maximum sulfur content is less than 0.5% by weight.	NA
4.	Machining of metals, providing total solvent usage at the source for this activity does not exceed 60 gallons per month.	NA
5.	Internal combustion engines using only gasoline, diesel fuel, natural gas, or LP gas rated at 50 hp or less.	NA
6.	Volatile organic compound and hazardous air pollutant storage containers, as follows: (a) Tanks, less than 1,000 gallons, and throughput less than 12,000 gallons per year; (b) Lubricating oils, hydraulic oils, machining oils, and machining fluids.	NA
7.	Machining where an aqueous cutting coolant continuously floods machining interface.	NA
8.	Degreasing operations, using less than 145 gallons per year.	NA
9.	Maintenance equipment, not emitting HAPs: brazing, cutting torches, soldering, welding.	NA
10.	Underground conveyors.	NA

SECTION C - INSIGNIFICANT ACTIVITIES

	Description	Generally Applicable Regulation
11.	Coal bunker and coal scale exhausts.	401 KAR 63:010
12.	Blowdown (sight glass, boiler, compressor, pump, cooling tower).	NA
13.	Stationary fire pumps.	NA
14.	Grinding and machining operations vented through fabric filters, scrubbers, mist eliminators, or electrostatic precipitators (e.g., deburring, buffing, polishing, abrasive blasting, pneumatic conveying, woodworking).	401 KAR 63:010
15.	Vents from ash transport systems not operated at positive pressure.	401 KAR 63:010
16.	Wastewater treatment (for stream less than 1% oil and grease).	NA
17.	Heat exchanger cleaning and repair.	NA
18.	Repair and maintenance of ESP, fabric filters, etc.	NA
19.	Any operation using aqueous solution (less than 1% VOC).	NA
20.	Laboratory fume hoods and vents used exclusively for chemical or physical analysis, or for “bench scale production” R&D facilities.	NA
21.	Machinery lubricant and waxes, including oils, greases or other lubricants applied as temporary protective coatings.	NA
22.	Purging of gas lines and vessels related to routine maintenance.	NA
23.	Flue gas conditioning systems.	NA
24.	Equipment used to collect spills.	NA

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

	Description	Generally Applicable Regulation
25.	Ash pond and ash pond maintenance.	NA
26.	Emergency generators: gasoline-powered (<110 hp), diesel-powered (<1600 hp).	NA
27.	Lime handling system; including truck unloading (for scrubber lime and stabilization lime), and lime feed systems. (changed to EU-05 non insignificant)	401 KAR 63:010
28.	Fly ash storage silos (both loading and unloading).	401 KAR 63:010
29.	Off-specification used oil fuel burned for energy recovery	NA
30.	Bottom ash screening and sizing system.	401 KAR 63:010
31.	Railcar/truck flyash loadout.	401 KAR 63:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Nitrogen oxides, sulfur dioxide, PM and PM10 (filterable and condensable), visible emissions (opacity), mercury, VOC, and carbon monoxide emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. Emission Unit 17 shall be performance tested initially for compliance with the emission standards for PM/PM_{10} (filterable and condensable), sulfur dioxide (SO2), nitrogen oxides (NOx), and carbon monoxide (CO), VOCs, mercury H_2SO_4, and fluorides by applicable reference methods, or by equivalent or alternative test methods specified in this permit or approved by the cabinet or U.S. EPA. For Emission Unit 17 annual performance tests for PM/PM_{10}, H_2SO_4 and VOCs will be conducted.

4. After the initial compliance test for Unit 17, and CEMS/COMs certification as stated in 401 KAR 50:055, continuing compliance with the emission standards shall be determined by continuous monitoring systems for NOx, CO, PM/PM10, mercury, and SO2. Continuing compliance with the emission standards for H2SO4 mist shall be determined by following provision of the CAM plan in Section B of this permit.

5. The permittee shall evaluate the relationship between CO and VOC during the initial and annual stack tests. Results of this evaluation shall be submitted to the Division within sixty days after submitting the annual test results.

<u>For Emission Unit 17</u>:

6. The permittee shall complete a study of the CFB to determine the optimized performance of the SNCR system within 18 months commencement of commercial operation(40 CFR 72.2). The Kentucky Division for Air Quality shall have 60 days to review and approve the optimization study. Should the optimization study indicate that 0.07 lbs/mmBtu is unachievable, then a significant revision to the permit will be required. Under no case shall the revised BACT limit be greater than 0.09 lbs NOx/mmBtu.

7. The NOX emission limit of 0.07 lbs/mmBtu is waived prior to the completion of the SNCR optimization study activity as detailed in Condition 2. This waivor is granted for no more than 545 days after commencement of commercial operation. However, the nitrogen oxide emissions rate not exceed 0.09 lbs/mmBtu during the optimization study. If the optimization study indicates that the 0.07 can not be achieved on a continuing basis, the applicant may file an application for a significant revision to this permit.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

For Emission Unit 03:

8 The permittee shall install, operate, and optimize a Selective Non-Catalytic Reduction (SNCR) system for the reduction of NO_x emissions from Unit 3. The optimization study must begin no later than 6 months after operation commences. Sixty days prior to initiating the study, the permittee shall submit a detailed optimization protocol for Division approval including the specific dates of the optimization study and the boiler operating conditions to be tested.

9. The permittee shall complete a 12-month study to determine the optimized performance of the CFB/SNCR system within 18 months of commercial operation. The NO_x emission limit of 0.07 lb/mmBtu is waived for the specific SNCR optimization study activity. The Kentucky Division for Air Quality shall have 60 days to review the optimization study. Should the optimization study indicate that 0.07 lbs./ mmBtu is unachievable, the NOx emissions rate shall be the optimized rate up to a maximum of 0.10 lbs./mmBtu.

10 The CFB shall be performance tested initially for compliance with the emission standards for particulate matters (PM and PM10), sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), beryllium (Be), and the applicable hazardous air pollutants. Appropriate test methods shall be used (see 401 KAR 50:015).

11. After the initial compliance test as stated above, continuing compliance with the emission standards shall be determined by continuous emission monitors for Opacity, NO_x, and SO_2. Ongoing compliance with the emission standard for CO shall be determined by monitoring for CO emissions using a continuous emission monitor. Ongoing compliance with the emission standards for beryllium and the applicable hazardous air pollutants (HAPs) shall be based on quarterly fuel analyses and calculations using established baseline factors developed during the initial compliance test.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Ashland Regional Office
P.O. Box 1507
Ashland, KY 41105-1507

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

12. Within 18 months of startup of the Unit 08 CFB, the permittee shall install and commence operation of an ambient monitoring station for measurement of ambient ozone. The ozone monitoring equipment shall be operated and maintained in accordance with 40 CFR 58, Appendix B. If no ozone exceedances are observed for a period of three (3) consecutive years after commencement of operation of Emission Unit 17, the permittee may cease the monitoring program.

13. SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
   d. If any additional applicable requirements of the Acid Rain Program become applicable to the source

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL CONDITIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in the permit and
    b. Non-applicable requirements expressly identified in this permit.

17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

18. The permittee shall submit a startup and shut down plan to implement the requirements of this permit and 401 KAR 50:055. The plan shall be submitted at least ninety (90) days prior to the startup of the Unit #4 for the Division's approval. The startup/shutdown plan will be accessible for public review at the Division's central office and the regional office.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

SECTION G - GENERAL CONDITIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in the permit and
    b. Non-applicable requirements expressly identified in this permit.

17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

18. The permittee shall submit a startup and shut down plan to implement the requirements of this permit and 401 KAR 50:055. The plan shall be submitted at least ninety (90) days prior to the startup of the Unit #4 for the Division's approval. The startup/shutdown plan will be accessible for public review at the Division's central office and the regional office.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

SECTION G - GENERAL CONDITIONS (CONTINUED)

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) **Construction, Start-Up, and Initial Compliance Demonstration Requirements**
Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, Emission Unit 17 in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.
   c. The date when the maximum production rate specified in the permit application was achieved.

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee

SECTION G - GENERAL PROVISIONS (CONTINUED)

must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

2. The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit (Section J) and the Phase II permit application (including the Phase II NO_x compliance plan, if applicable) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

SECTION G - GENERAL CONDITIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H – ALTERNATE OPERATING SCENARIOS

N/A

SECTION I – COMPLIANCE SCHEDULE

N/A

SECTION J - PHASE II ACID RAIN PERMIT

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NOx requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application.

5) Summary of Actions

Statement of Basis:

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, 401 KAR 50:060, Acid Rain Permit, and 40 CFR Part 76 (Emission Units 01 and 02).

PERMIT (Conditions)

Plant Name: Hugh L. Spurlock Station
Affected Unit: 01

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR Part 73	9,821*	9,821*	9,821*	9,821*	9,841*

NO_x Requirements	
NO_x Limits	Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves a NO_x standard emissions limitation compliance plan for unit 1. The NO_x compliance plan is effective from January 1, 2000 through December 31, 2004. Under the NO_x compliance plan, annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.50 lb/mmBtu for dry bottom wall-fired boilers. In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

PERMIT (Conditions)

Plant Name: Hugh L. Spurlock Station
Affected Unit: 02

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR Part 73	16,586*	16,586*	16,586*	16,586*	16,621*

NO_x Requirements	
NO_x Limits	Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves a NO_x standard emissions limitation compliance plan for unit 1. The NO_x compliance plan is effective from January 1, 2000 through December 31, 2004. Under the NO_x compliance plan, annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable limitation, under 40 CFR 76.7(a)(1), of 0.40 lb/mmBtu until calendar year 2008. In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

PERMIT (Conditions)

Plant Name: Hugh L. Spurlock Station
Affected Units: 03 (Emission Unit 08) and 04 (Emission Unit 17)

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR Part 73	0*	0*	0*	0*	0*

NO_x Requirements	
NO_x Limits	N/A**

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR Part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

** This unit currently does not have applicable NO_x limits set by 40 CFR, part 76**.**

SECTION K – NOx BUDGET PERMIT

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Kentucky Environmental and Public Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NO_x requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

2) NO_x Budget Permit Application, Form DEP 7007EE

The initial NO_x Budget Permit application for electrical generating units (1-3) was submitted to the Division and received on November 24, 2003. Application for Unit 4 was received with the PSD application initially submitted on September 13, 2004 Requirements contained in that application are hereby incorporated into and made part of this NO_x Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3) Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

Affected units are one (1) 3500mmBtu/hr dry-bottom wall-fired boiler, one (1) 4850 mmBtu/hr tangentially fired boiler and two (2) 2500 mmBtu/hr pulverized coal-fired CFB boilers. Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. The units use coal as a fuel source, and are authorized as base load electric generating units.

4) Summary of Actions

The NO_x Budget Permit is being issued as part of this renewed and revised Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100.